

FIG. 1

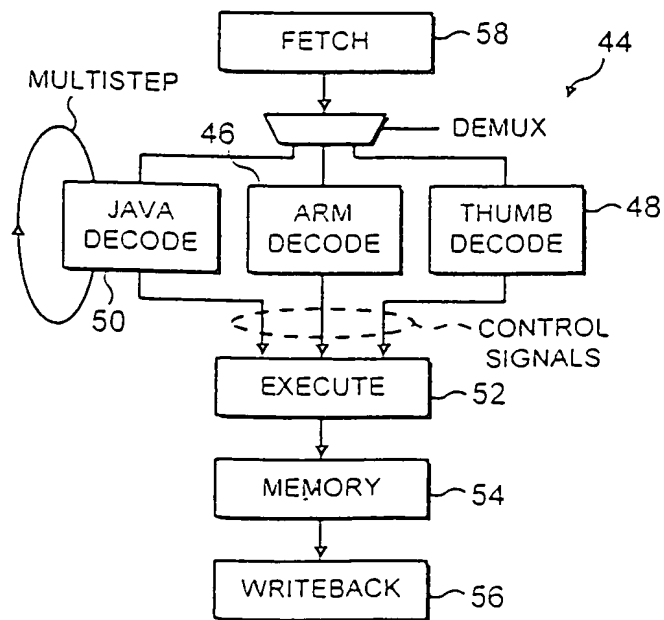


FIG. 2

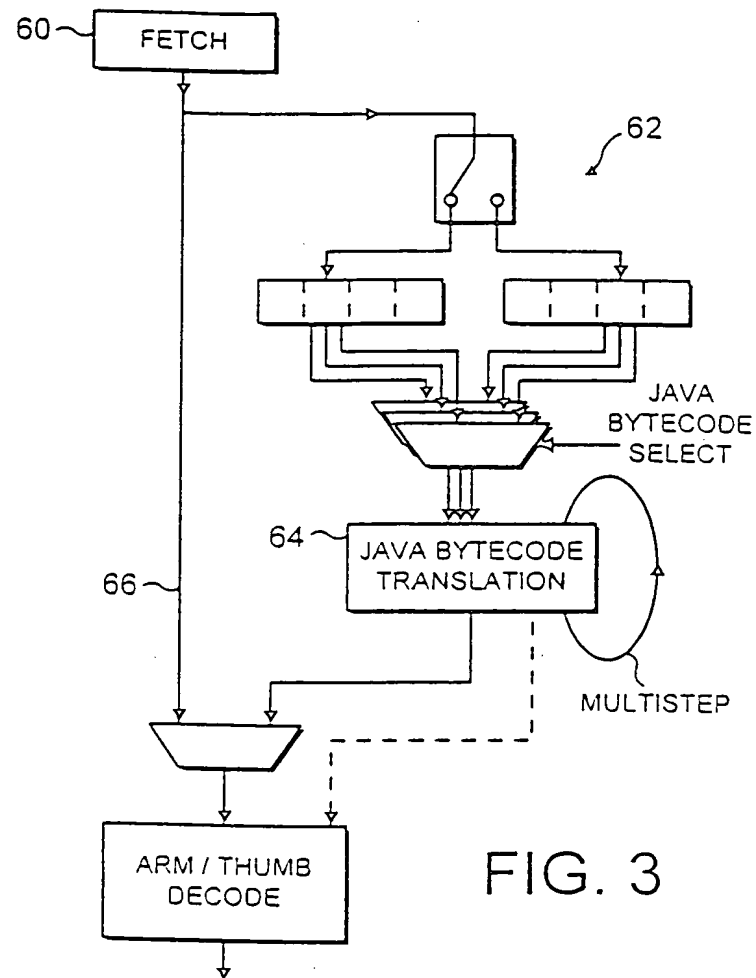


FIG. 3

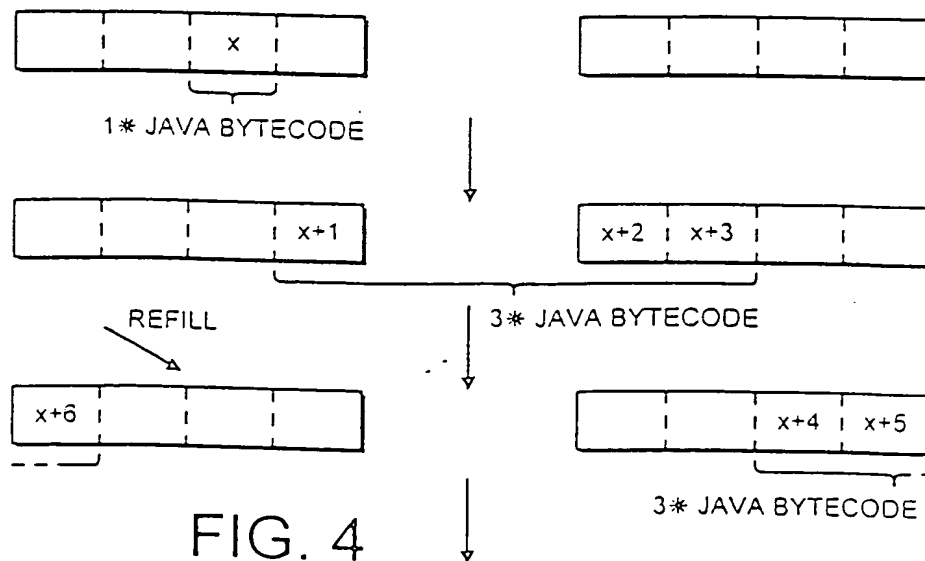


FIG. 4

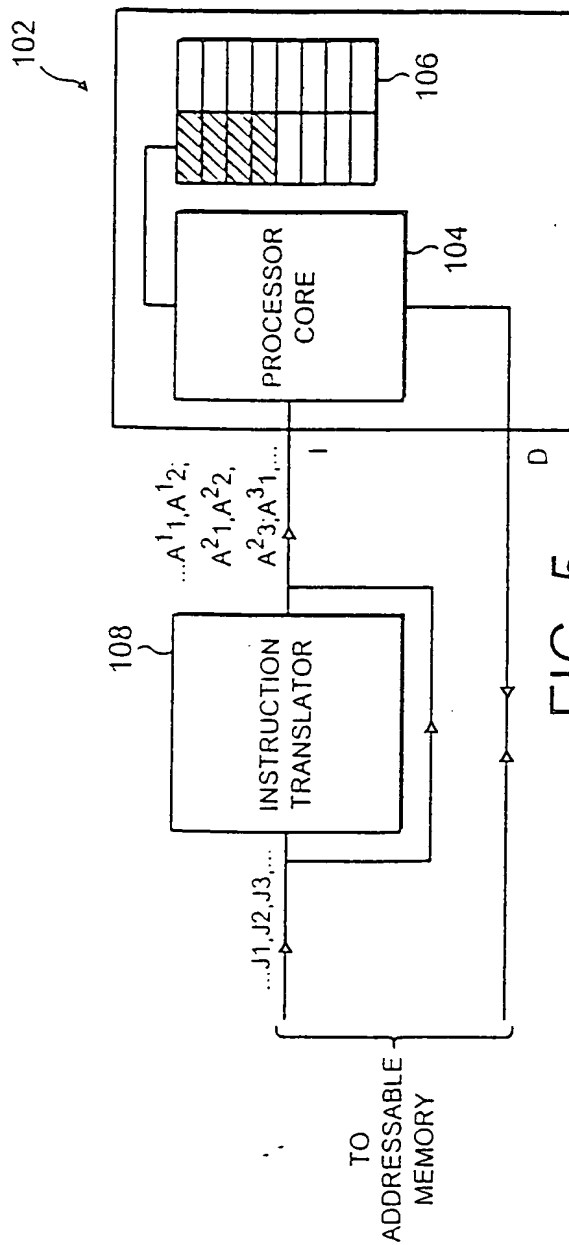


FIG. 5



JAVA INSTRUCTION	iadd (RF=2, RF>0)	iadd (RF=2, RF>1)	iadd (SA=-1)
ARM INSTRUCTION(S)	↑ LDR R0[RStack, #4] (POP)	↑ LDR R3[RStack, #4] (POP)	ADD R3, R3, R0
STATE	00000	00100	00111
R0	E	SOA TOS	SOA TOS
R1	E	E	E
R2	E	E	E
R3	E	SOB TOS-1	(SOA+SOB) TOS

JAVA INSTRUCTION	lload ¹ (RF=0, RE>2)	lload ² (RF=0, RE>2)	lload ² (RF=0, RE=2)
ARM INSTRUCTIONS	↑ LDR R1,[Rvars, #4] LDR R0,[Rvars, #0]	↑ STR R3[RStack, #4] (PUSH)	↑ LDR R3,[Rvars, #4] LDR R2,[Rvars, #0]
STATE	00000	00100	10011
R0	E	SOC TOS-1	SOC TOS-3
R1	E	SOD TOS	SOD TOS-2
R2	E	E	SOE TOS-1
R3	(SOA+SOB) TOS	(SOA+SOB) TOS	SOF TOS

FIG. 6

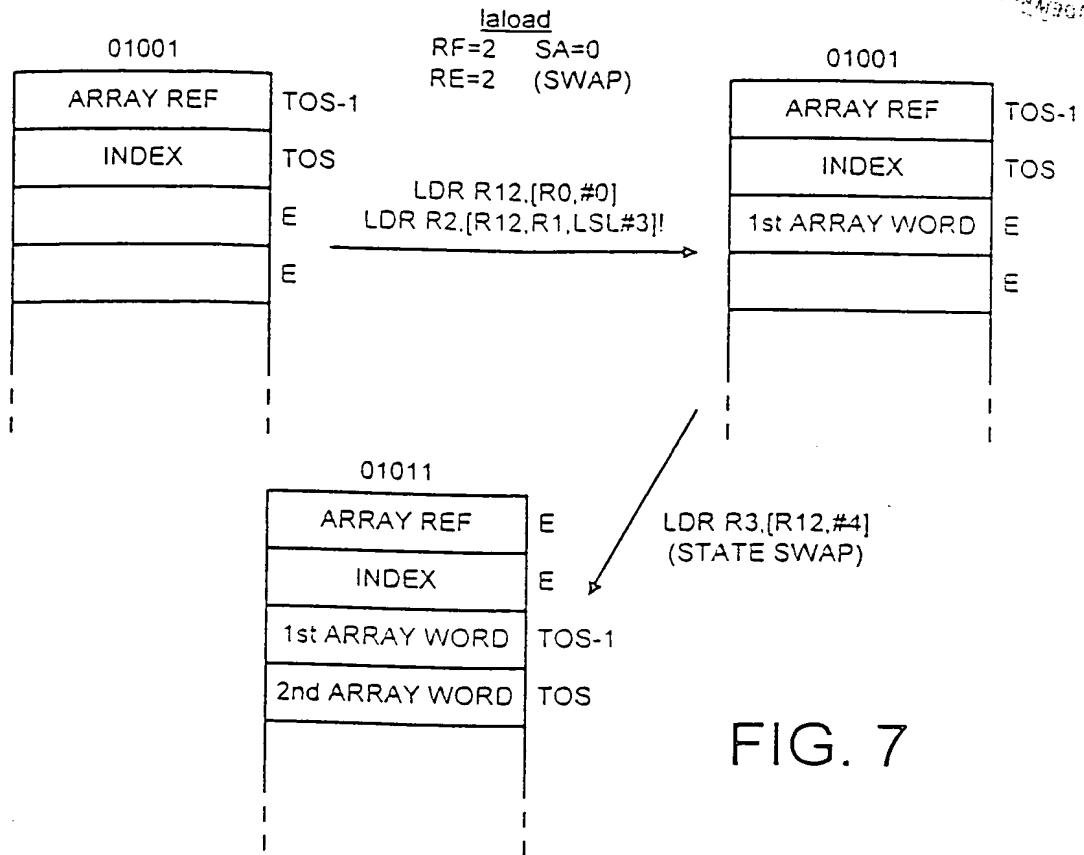


FIG. 7

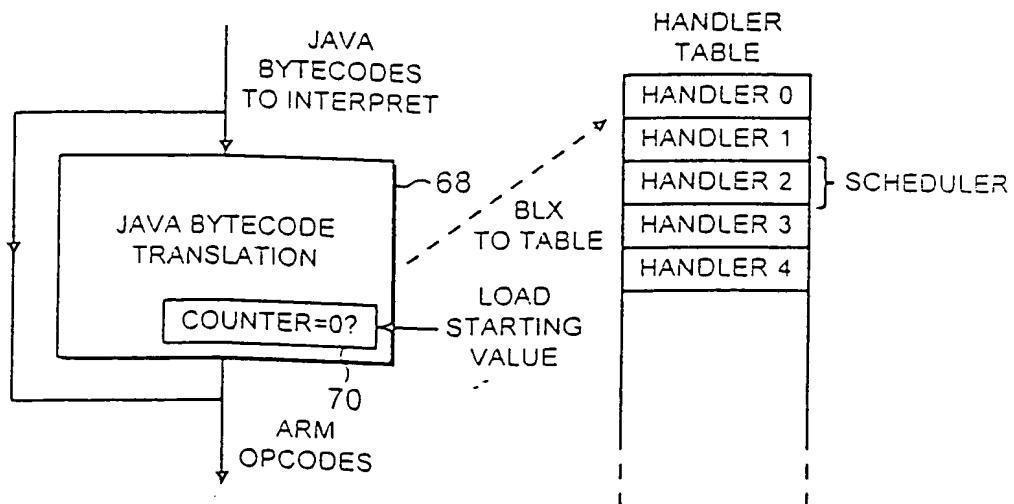


FIG. 9

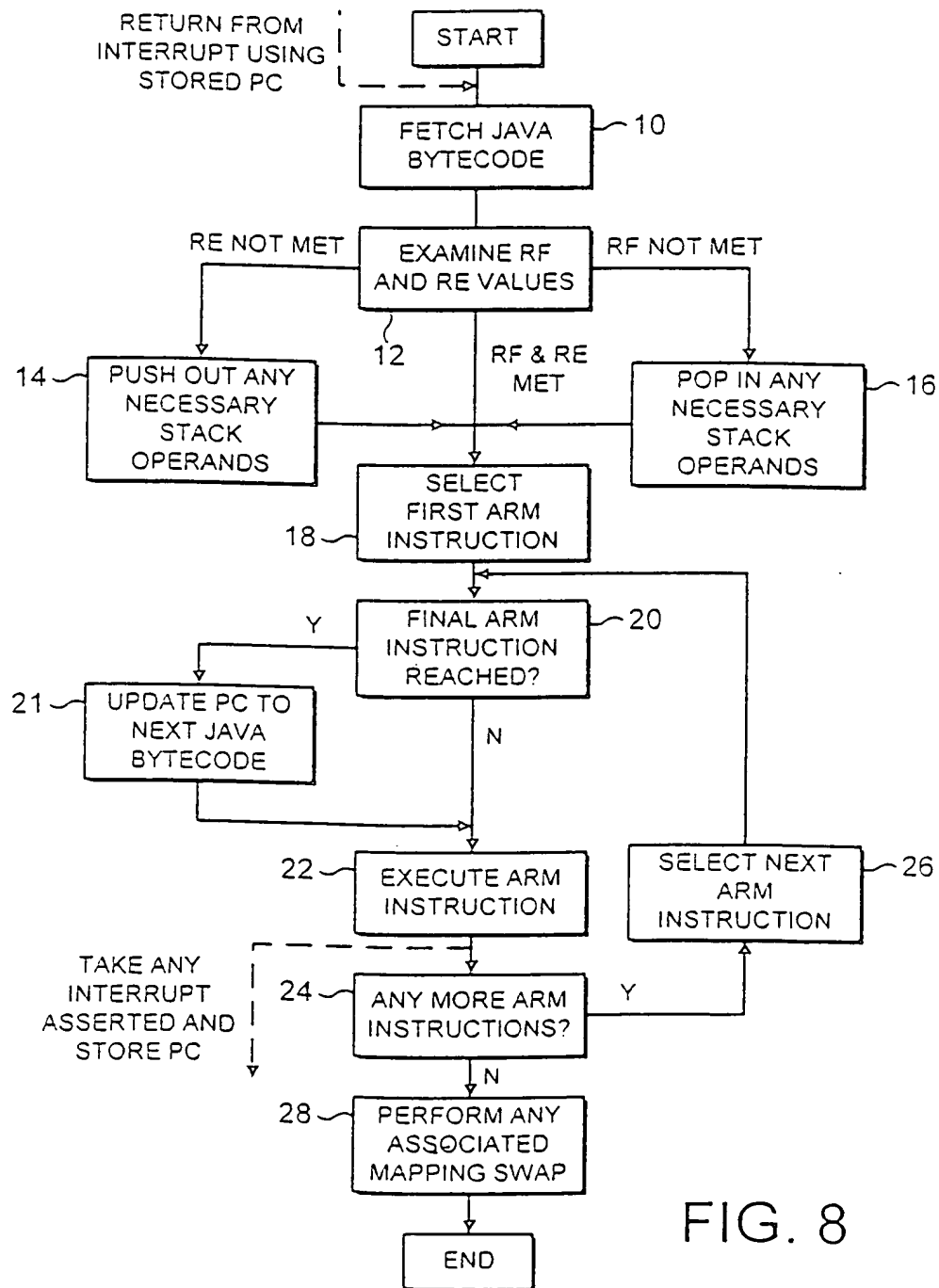


FIG. 8

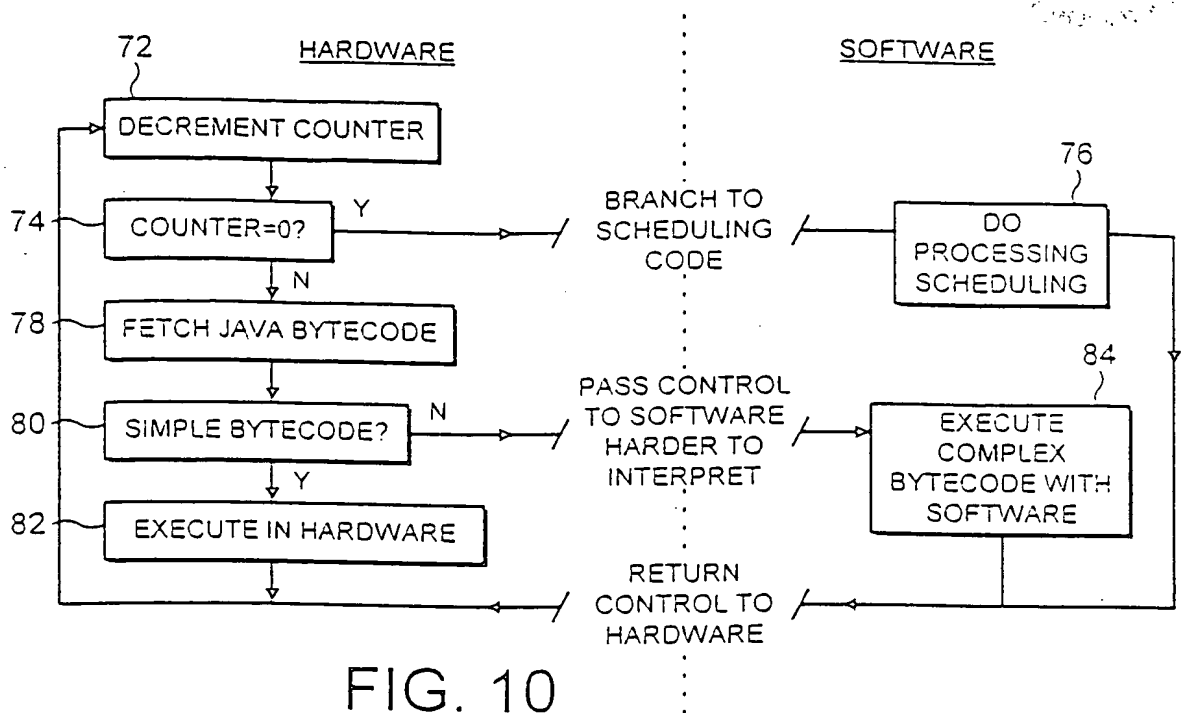


FIG. 10

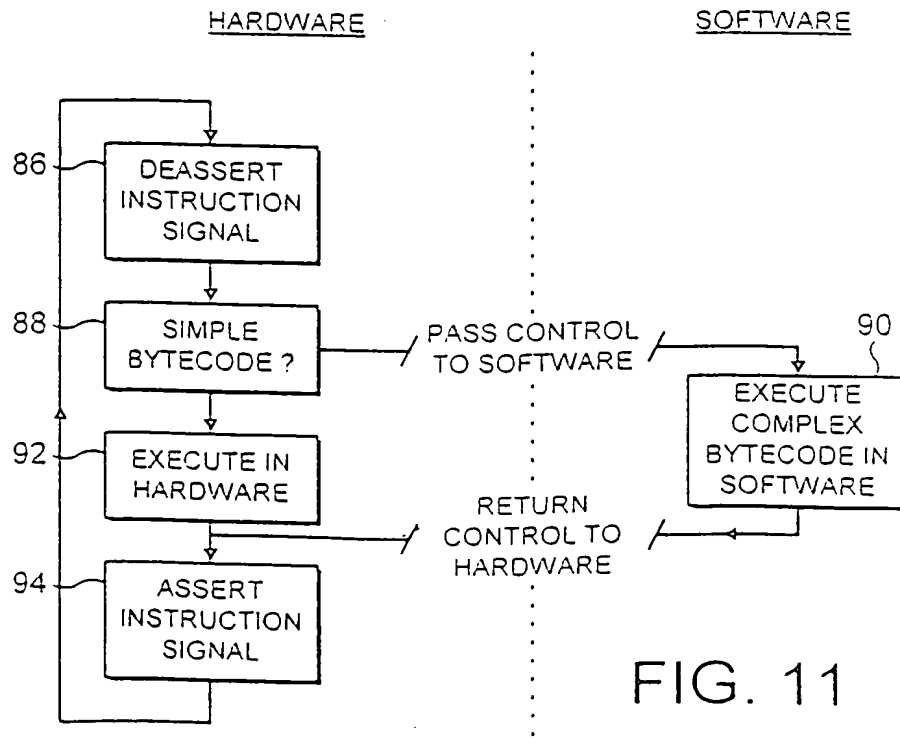


FIG. 11

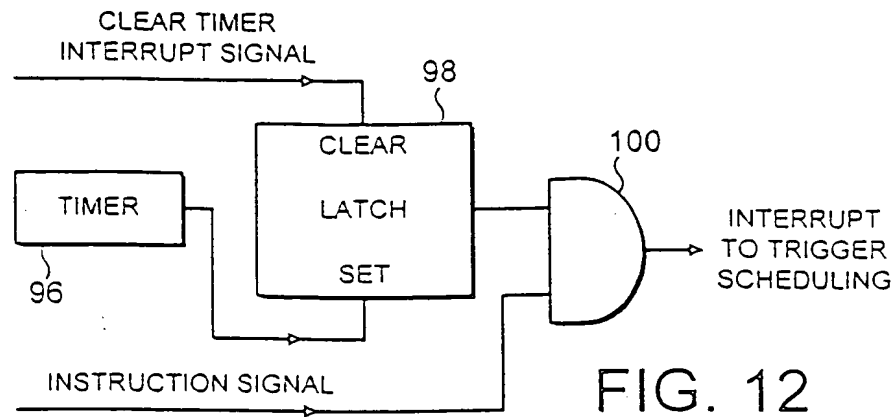


FIG. 12

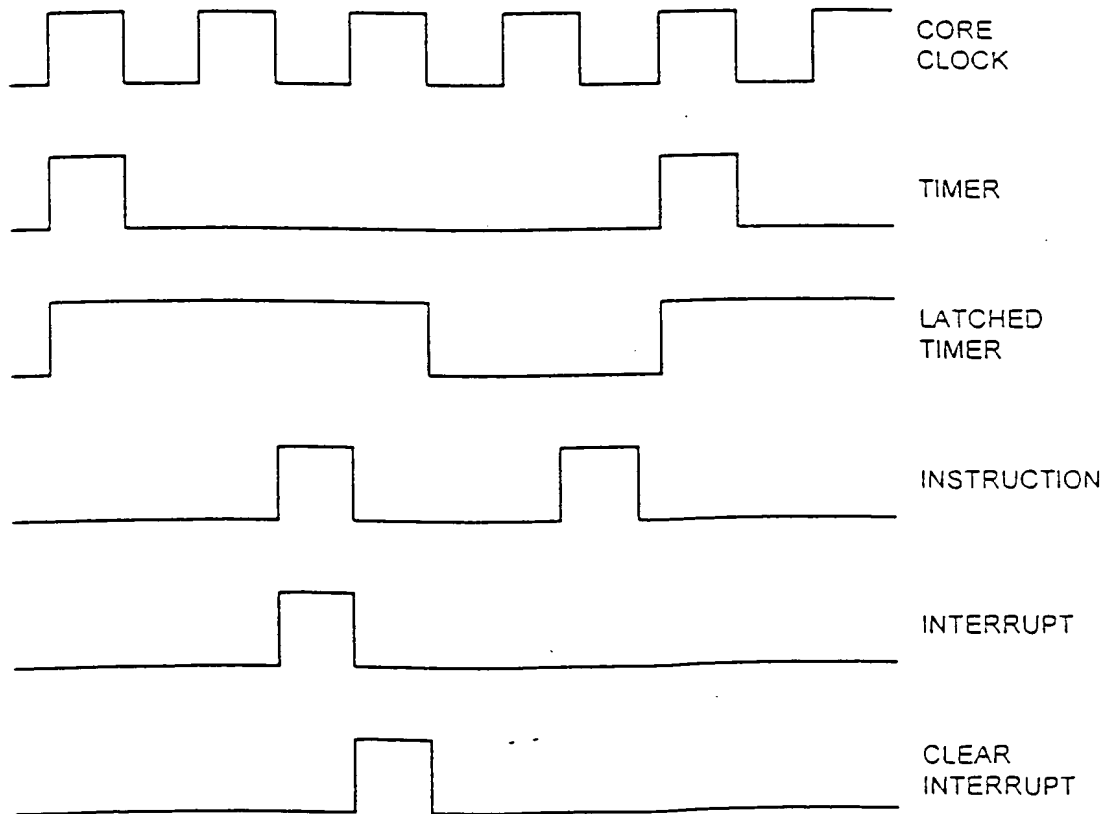


FIG. 13